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October 16, 1995

Mr. Alan Fogwill  
Senior Economist  
Centra Gas British Columbia Inc.  
P.O. Box 3777  
Victoria, B.C.  
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Dear Mr. Fogwill:

Re: Centra Gas British Columbia Inc. - Port Alice  
1995 - 2009 Integrated Resource Plan

The Commission has reviewed the Centra Gas - Port Alice 1995-2009 Integrated Resource Plan ("IRP") and is satisfied that the IRP, as filed, substantially meets the requirements as set out in the BCUC Guidelines. Consequently, the Commission approves the IRP. Please note that approval of the IRP does not constitute pre-approval of the DSM programs discussed within the IRP. A copy of the staff report which discusses the IRP is attached for your information.

Yours truly,

Robert J. Pellatt

SW/lm  
Attach.

## **BCUC Staff Report**

### **Centra Gas British Columbia Inc. - Port Alice 1995-2009 Integrated Resource Plan**

#### **RECOMMENDATION**

The Commission staff has reviewed the aspects of the IRP and has determined that it is in accordance with the principles of the Commission's 1993 Guidelines. Given the small size of the utility, the limited resources, and the stability of the demand and supply, the staff finds the present report acceptable, and recommends that 1995 Centra-Port Alice District IRP be approved.

#### **BACKGROUND**

Centra Gas operates a small propane distribution system in the Port Alice District that serves approximately 245 customers on the northern part of Vancouver Island. The system is comprised of two 18,000 US gallon storage tanks, a single vaporizer and a series of distribution pipelines. The storage tanks hold approximately 13 days of continuous peak day demand. The vaporizer unit is currently being replaced and upgraded which will increase capacity of the system to meet a peak day demand of approximately 210 GJ.

In April of this year, by Order G-34-95, the Commission approved rate increases of approximately 33.95%. At that time the Commission also accepted Centra's proposal to file a short plan based on IRP principles, with input from the Village of Port Alice, in lieu a consolidated plan with Centra-Whistler District.

#### **ANALYSIS**

The short report is consistent with Centra's earlier proposal. The staff has evaluated the plan according to the principles in the 1993 IRP Guidelines.

##### Guideline 1: Identification of the Objectives of the Plan

Since Centra-Port Alice is a small division, the utility drew upon information from IRPs prepared for other district operations (i.e., Whistler and Fort St. John), both of which had consultative groups to determine their respective objectives. Through consultation with a municipal counselor from Port Alice District, Centra confirmed the objectives for Port Alice as:

- Provide safe and reliable service by minimizing the frequency and length of service outages;
- Incorporate environmental and social values in the consideration of demand and supply resources;
- Provide stable and predictable propane bills to customers by minimizing service costs;
- Provide the opportunity for the company to earn stable returns to the shareholders based on efficient operations; and
- Minimize demand and supply resource risk.

As with other Centra plans, the Commission staff finds these objectives acceptable.

### Guideline 2: Development of a Range of Gross (Pre-DSM) Demand Forecasts

Centra estimates that propane demand in the Port Alice District will remain relatively stable over the planning period. Since the Port Alice is a very small operation, Centra used a simple approach to estimating the range of demand forecasts based on projections of customer growth in the community rather than using econometric or end-use forecasting methods.

Centra explicitly stated its assumptions underlying these demand projections. The high growth scenario is based on a growth rate of approximately 1.66% per annum, which was the estimated growth rate from 1994 to 1995 and translates to 4 - 5 additional customers per year. The low growth scenario is based on the actual historical decline in population at a rate of .92% per annum since 1976.

Centra assessed the risk of the simple demand forecast and concluded that, because of the uncertainty of the estimates, a five-year planning target minimizes forecast risk. The staff agrees with this assessment particularly since last year's growth reverses a previously declining trend and it is unclear whether this represents a new trend. Although the Commission staff generally favor examination of a ten-year portfolio to have some indication of what resources might be necessary over the longer term, the staff does not advise revision of the plan, rather recommends that these demand forecasts be reassessed at the time of the next plan.

The staff concludes that the demand forecasts appear reasonable and reflect the apparent stability of the economic base of the Port Alice area. Given that no resources are deemed necessary until beyond 2004 even with the high demand forecast, the Commission staff finds this risk assessment acceptable.

### Guideline 3: Identification of Supply and Demand Resources

### Guideline 4: Characterizing Supply and Demand Resources

#### **Supply Resources**

There are two supply components to a propane system: the propane commodity and the distribution network. Centra obtains propane commodity supply from the competitive market. Centra currently holds a two year supply agreement approved by order E-19-95 commencing April 1, 1995.

Under the high growth scenario, the current distribution system is sufficient to meet estimated demand until 2004. Consequently, no additional supply resources other than the current supply system with work-in-progress replacements were identified nor characterized according to its particular attributes.

The current pipeline capacity is sufficient to provide propane energy service to meet the high growth demand forecast to 2009. The supply constraint is expected to come from the capacity of the new vaporizer. The old vaporizer, installed in 1993, experienced very high maintenance costs since installation and is being replaced with new equipment that will have a peak capacity of approximately 210 GJ per day. This capacity increase will be sufficient to meet the peak day demand under the high growth scenario to 2004.

The plan makes no mention of the possible need to replace the 29-year old copper service lines which the staff had raised as a concern in the revenue requirements negotiations. At the present time, the staff recognizes that inclusion of these upgrades in the plan may be premature pending the outcome of further studies but advises Centra to provide such information as it becomes available.

### **Demand Resources**

In addition to current supply system information, Centra evaluated eight demand resources. Descriptions of the demand resources are explained in the Demand Resource Fact sheets from Whistler Integrated Resource Plan (the Whistler system is also based on propane). Centra does not, however, provide specific information about how the assumption of costs or penetration rates differ for the smaller Port Alice operation.

To characterize the demand resources, Centra employed the standard tests such as the total resource cost (TRC) test and the rate impacts measure (RIM). The avoided cost used for these tests was \$7.50 per GJ reflecting the high costs of alternative supply in an isolated propane system. Although five of the resources showed favorable TRC ratios (i.e., ratios greater than 1 but less than 2), all fared poorly on the RIM test even with no utility subsidization or rebate. One exception was the Residential Home Visit Program which yielded a particularly high TRC ratio (3.06), but still yielded a low RIM test of .53.

In general, the Commission staff finds that the Centra's identification and characterization of the demand resources meets with the principles of the IRP guidelines.

#### Guideline 5: Development of Multiple Integrated Resource Portfolios

#### Guideline 6: Evaluation and Selection of Resource Portfolios

Based on the uncertainty of the demand forecasts and since difference between the high and low demand forecasts amounts to only 20 GJ--the size of one or two large volume customers--Centra based its portfolio analysis on the high growth demand estimates. Using this high demand forecast, no additional supply resources will be required until 2004. Consequently, Centra offers only the current resource mix as a viable portfolio.

The utility did not construct any portfolios which contain demand side resources because of the unfavorable RIM test ratios on all DSM programs. Centra concludes that alternative portfolios which contain DSM programs would not be preferable to the status quo. In doing so, the Commission staff infer that Centra has made some implicit tradeoffs between the social value of the DSM programs and the objective for rate and bill stability.

While the staff prefers to see construction of alternative portfolios so that these tradeoffs can be observed as transparent and clear, the staff accepts this evaluation based on the results of the standard tests, the small size of the utility service area, and the recent dramatic price increase. Staff recognizes that pursuit of these programs would not likely lead lower societal cost, considering that lower cost DSM opportunities may exist elsewhere.

#### Guideline 7: The Action Plan

The action plan does not recommend any specific actions at this time except to reassess the supply and demand situation in the next IRP in two years time. Given the stability of the demand and the current excess capacity position (which is expected to continue for years into the future), the staff finds the action plan acceptable.

#### Guideline 8: Public Input

Given that Centra-Port Alice is a small utility, Commission staff finds it appropriate to have a condensed public input process in the form of consultation with municipal counselor.

#### Guideline 9: Regulatory Input

#### Guideline 10: Government Policy Input

#### Guideline 11: Regulatory Review

In as much as Centra has drawn from information from approved IRPs for Fort St. John and Whistler districts (also propane), regulatory input has been provided indirectly. Staff recognizes that Centra has been sensitive to the differences between these communities when preparing the Port Alice IRP (i.e., Whistler is experiencing growth, while alternatively, the population in Port Alice is anticipated to remain relatively stable).

### **CONCLUSION**

Given the size of the utility and the Commission's direction to prepare a short IRP, Centra has fulfilled its obligations according to the principles of IRP.